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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,608

03/29/2004

Jen-Hsiang Lee

TSAI 136

9746

7590

08/09/2005

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EXAMINER

EDWARDS, ANTHONY Q

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,608

Applicant(s)

LEE, JEN-HSIANG

Examiner

Anthony Q. Edwards

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-17, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 6 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 3 and 20 are objected to because of the following informalities: claim 3 depends from claim 1, but recites "plastic material" which is first mentioned in claim 2. Likewise, claim 20 recites "rack and four the removable apparatuses" wherein the word "the" is probably a typographic error. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S.

Patent Application Publication No. US2003/0011974 to Curlee et al. ("Curlee" hereinafter).

Referring to claim 1, Curlee discloses a removable hard disk module installed in a module fixing device (see Fig. 2), the removable hard disk module comprising a module sidewall (upstanding wall of 18), a first sliding device (28) fixed on the module sidewall, wherein the first sliding device further comprises a buffer device (32) therein, and a second sliding device (46) fixed on the module sidewall and behind the first sliding device (see Fig. 6), wherein the first sliding device and the second sliding device support the removable hard disk module so that the removable hard disk module slides in the module fixing device.

Referring to claims 2 and 3, Curlee discloses a removable hard disk module, wherein the first sliding device (28) is a shock absorption device made of a plastic material, i.e., POM or ABS material (see paragraph 0015, lines 1-4).

Referring to claim 4, Curlee discloses a removable hard disk module, wherein the second sliding device (46) is made of a metal pin or high strength pin (see Fig. 6).

Referring to claim 5, Curlee discloses a removable hard disk module, wherein the module fixing device further comprises a supporting wall (25), the supporting wall further comprising a slim slide (not numbered) to support the removable hard disk module so that the removable hard disk module slides in the module fixing device (see Fig. 2).

Referring to claim 7, Curlee discloses a removable hard disk module, wherein the removable hard disk module further comprises a handle (38) at a front portion thereof for convenient installation or removal of the removable hard disk module (see Fig. 2).

Referring to claim 8, Curlee discloses a removable hard disk module, wherein the handle (38) further comprises a push block (i.e., the small triangular part near end 36) to push the slim slide so as to release conveniently the removable hard disk module from the module fixing device when the handle is open (see Figs. 2, 5 and 6).

Referring to claim 9, Curlee discloses a removable hard disk module, wherein the first sliding device (28) further comprises a convex sliding surface (44) for contact with the slim slide (see paragraph 0016, lines 8-11).

Referring to claim 10, Curlee discloses a removable hard disk module, wherein the buffer device (32) is made of a shock absorption rubber (see paragraph 0015, lines 4-7).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curlee. Curless teaches the removable hard disk module as substantially claimed, except for the first sliding device and the second sliding device being about 1 mm thick. It would have been obvious to one having ordinary skill in the art at the time of the invention to provide first and second sliding members that are about 1 mm thick, since such modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art (*In re Rose*, 105 USPQ 237 (CCPA 1955)).

Claims 12-17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curlee in view of U.S. Patent Application Publication No. US2002/0101713 to Eland. Referring to claim 12, Curless discloses the removable apparatus as substantially claimed (see above rejection to claims 1 and 5), except for specifically teaching the use of the device in a server rack. Eland teaches the use of removable modules in rack-mounted computer enclosure (see paragraph 0006). It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize the removable module of Curlee in a server rack, as taught by Eland, since the device of Eland allows for maximum usage of removal storage devices.

Referring to claim 13, Curlee in view of Eland disclose the removable apparatus as claimed (see the above rejection to claim 9).

Referring to claims 14 and 15, Curlee in view of Eland disclose the removable apparatus as claimed (see the above rejections to claims 2 and 3).

Referring to claim 16, Curlee in view of Eland disclose the removable apparatus as claimed (see the above rejection to claim 4).

Referring to claim 17, Curlee in view of Eland disclose the removable apparatus as claimed (see the above rejection to claim 10).

Referring to claim 19, Curlee in view of Eland disclose the removable apparatus as claimed (see the above rejection to claim 11).

Referring to claim 20, Curlee in view of Eland disclose the removable apparatus as substantially claimed, including the server rack being a wherein the server rack is a 1U server rack (see paragraph 0006 of Eland). Likewise, Official Notice is taken that it is well known in the art of server rack computer systems to provide four removable apparatuses (or storage device) configured in the 1U rack in a horizontal width direction. It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize the server rack of Curlee, as modified, to include four removable devices or any other number, based on the user's needs and the size of the rack, since this configuration provides for maximum storage capacity.

Allowable Subject Matter

Claims 6 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: the specific limitation of the slim slide, located on the supporting wall,

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including further a buffer device coupled to the second sliding device is not taught or suggested by the prior art references, and it would not have been obvious provide the same.

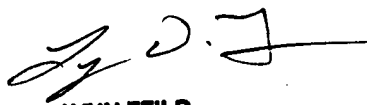
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 571-272-2042. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 4, 2005
aqe


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